#### U.S. Fish and Wildlife Service



## **Gray Wolves in Washington State**

### Questions and Answers

#### Why was the gray wolf listed as endangered?

Gray wolves (*Canis lupus*) nearly became extinct in the lower 48 states in the early part of the 20th century. Predator-control programs targeted wolves, and wolf habitat was altered and destroyed as forests were logged and then converted to agriculture and livestock production. Across the lower 48, many other species that made up the wolves' prey base were also made scarce or brought to near-extinction by settlers and market hunters. Predator-control programs, loss of habitat, and loss of prey resulted in the elimination of wolves throughout most of the lower 48 states, except in northeastern Minnesota and Isle Royale, Michigan. A few individuals were later found in the northern Rocky Mountains, although scientists believe those wolves dispersed from Canada.

#### What is the current status of gray wolves in the lower 48 states?

The gray wolf, excluding the Mexican wolf subspecies, in the lower 48 United States is currently assigned the following legal status under the ESA:

- threatened in Minnesota
- non-essential experimental in Wyoming
- not listed in Idaho, Montana, eastern one-third of both Oregon and Washington, and north-central Utah (all delisted due to recovery in 2009 and due to congressional action in 2011)
- endangered in all or portions of the 44 remaining conterminous states

#### What is the history of wolf populations in Washington State?

Historically, gray wolves were common throughout much of Washington, but numbers began to decline as human populations increased in the latter half of the 1800s. Encouraged by high prices for hides, bounties, and government sponsored predator control programs, wolves were believed to be extirpated from Washington by the 1930s. Sporadic reports of wolves were received over the next several decades, and increased during the 1990s to early 2000s, but no resident packs were documented during this time. Dispersing wolves from increasing populations in Idaho, Montana, and British Columbia, Canada, were likely responsible for the documented reports of wolves in northern Washington during the 1990s to early 2000s. In 2008, the first resident pack in the state since the 1930s was documented in Okanogan

County in north-central Washington. Since that time, wolves have continued to naturally recolonize the state via dispersal from resident Washington packs and neighboring states and provinces.

#### What is the current population status of gray wolves in Washington State?

Washington's wolf population has continued to grow, according to a statewide survey conducted by the Washington Department of Fish and Wildlife in 2014. The survey confirmed the presence of at least 68 wolves in 16 wolf packs with a total of 5 successful breeding pairs by the end of 2014. Wildlife managers emphasize that the actual number of wolves in the state is likely higher than those confirmed by the survey. The survey is not designed to account for every wolf within the state, but rather to monitor the species' progress toward recovery.

For more information, visit: http://wdfw.wa.gov/conservation/gray\_wolf/packs/

#### Why are some wolves in Washington federally listed endangered, and some not?

Gray wolves in Washington acquired federal protections under the Endangered Species Act (ESA) in 1973. When the U.S. Fish and Wildlife Service (USFWS) completed the Northern Rocky Mountain (NRM) Wolf Recovery Plan in 1987, only the states of Idaho, Montana, and Wyoming were included. In 2007, the USFWS published a final rule designating the NRM population of gray wolves as a Distinct Population Segment (DPS). The eastern third of Washington was included in the NRM DPS designation to account for dispersing wolves from populations in Idaho and Montana.

In 2008, the USFWS published a final rule to remove wolves in the NRM DPS from ESA protection. This rule was later challenged in federal court and, consequently, wolves were placed back under federal protection. The USFWS again published a final rule to remove the NRM DPS wolf population, excluding Wyoming, from the protections of the ESA in 2009, but the rule was vacated by a federal judge in 2010 which again restored federal protections to wolves in the NRM DPS. In 2011, President Obama signed the Department of Defense and Full-Year Appropriations Act, 2011; a rider in that bill directed the Secretary of the Interior to reissue the 2009 delisting rule. As a result, wolves in the NRM DPS (with the exception of Wyoming), including the eastern third of Washington were once again removed from ESA protections.

#### Who manages gray wolves in Washington State?

The USFWS is the primary agency responsible for managing wolves west of U.S Highway 97, State Route 17 and U.S. 395, while the Washington Department of Fish and Wildlife (WDFW) has primary management authority to the east of that line. Wolves that inhabit tribal lands east of highways 97, 17 and 395 are managed by those specific tribal entities.

# How will managers determine wolves have been recovered, and will they remove protections on wolves in Washington?

There are no federal wolf recovery goals or post-delisting monitoring requirements for Washington. In 2013, the USFWS published a proposed rule to remove gray wolves from the list of endangered and threatened wildlife where they are currently federally protected. This rule also constituted the completion of a status review for gray wolves in the Pacific Northwest, proposed to maintain endangered status for the Mexican wolf (*Canis lupus baileyi*), and proposed to reclassify the Eastern wolf (*Canis lupus lycaon*) from a subspecies of the gray wolf to a species (*Canis lycaon*).

At present, wolves are classified as an endangered species under state law (WAC 232-12-014) throughout Washington regardless of federal classification. The Washington Gray Wolf Conservation and Management Plan identifies three recovery areas in the state which includes Eastern Washington, the Northern Cascades, and the Southern WA Cascades and Northwest Coast. The WDFW is the primary agency responsible for managing wolves in the Eastern Washington recovery area while WDFW works with the USFWS under a cooperative agreement in the other two recovery areas. To view the Washington Gray Wolf Conservation and Management Plan, visit: http://wdfw.wa.gov/conservation/gray\_wolf/

#### What do I do if I think I have seen a wolf in Washington?

WDFW and the U.S. Fish & Wildlife Service keep track of wolf sightings and other evidence of wolves in Washington (tracks, scat, howling, and photos from motion-sensitive remote cameras)

To report sightings of a wolf or wolf tracks use WDFW's online reporting system (http://wdfw.wa.gov/conservation/gray\_wolf/reporting/sightings.html) or call 1-877-933-9847

#### What happens if a wolf kills livestock in Washington?

When livestock owners report suspected wolf-caused injuries or losses of livestock to WDFW or the USFWS, a depredation investigation team of agency staff respond to the scene to determine if wolves were involved. Other local, state and federal authorities assist with the investigation as needed.

Livestock or livestock carcasses are thoroughly examined, sometimes including full field necropsies, to help determine what kind of predator attacked or killed the animal. When wolves are determined to be the cause of injury or death, livestock owners are provided with assistance to address the potential for future depredations and are eligible to receive compensation for their losses.

For more information on how to report suspected livestock depredation in Washington, visit: http://wdfw.wa.gov/conservation/gray\_wolf/depredation/

#### What are the penalties for killing a wolf in Washington?

In the western two-thirds of Washington, wolves are federally listed as endangered under the Endangered Species Act (ESA). For species listed under the federal ESA, activities that may result in "take" of endangered species are generally prohibited. The definition of "take" includes to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct. Penalties for violations of the ESA include fines of up to \$100,000, with a maximum prison term of one year in jail.

In the eastern one-third of Washington, wolves are federally delisted, but remain state listed as endangered and receive protection from hunting, possession, malicious harassment, and killing under state law (WAC 232.12.014, RCW 77.15.120). Penalties for illegally killing a state endangered species range up to \$5,000 and/or one year in jail.

#### Is there a state hunting season for wolves in Washington?

There is no state hunting season for wolves in Washington. For more information on Washington hunting rules and regulations, visit http://wdfw.wa.gov/hunting/regulations/

Some tribes in Washington do permit the hunting of wolves by tribal members on reservation lands.

#### Were wolves re-introduced to Washington?

No. Wolves are returning naturally from dispersing populations in nearby states and provinces.

#### How did wolves re-populate the West?

Prior to reintroduction efforts in Idaho and the Yellowstone area, wolves from British Columbia, Canada, naturally recolonized northwestern Montana. Scientists believed 60 to 70 wolves were living in approximately 6 packs in Montana. To augment wolf recovery, USFWS re-introduced 31 wolves into Yellowstone National Park and 35 into central Idaho in the mid-1990s. Those three subpopulations (northwest Montana, central Idaho, and the greater Yellowstone area) became the foundation for wolf recovery in the Northern Rocky Mountains. Since then, wolf populations continue to recover throughout the Northern Rocky Mountains, where state agencies and the USFWS estimated a minimum of 1,899 wolves living in at least 313 packs in 2014. In fact, populations have recovered to the point that hunting

and trapping are now legal in Montana and Idaho. As these wolf populations continue to recover and expand into other areas, it is likely that Washington will experience additional dispersing wolves in the near future.

#### What types of habitat do wolves use?

Gray wolves use so many different habitat types that they are equally at home in the deserts of Israel, the deciduous forests of Wisconsin, and the frozen arctic of Siberia. Within North America, gray wolves formerly ranged from coast to coast with the exception of the mid-Atlantic states, the Southeast, and perhaps parts of California. They were found in almost all habitat types; prairie, forest, mountains, and wetlands. In the lower 48 states today, they are found in mostly forested lands in Minnesota, Wisconsin, Michigan, Montana, Idaho, Oregon, Washington and Wyoming. The Mexican grey wolf can be found in Arizona and New Mexico.

Wolves can live almost anywhere if they have abundant wild prey and where conflicts are low so that excessive numbers are not taken by humans. The best habitat for wolves in the West is on public lands where both these needs are met.

#### Do wolves need wilderness areas to survive? Can they survive near urban areas?

It was thought that gray wolves were a wilderness species, but wolves are expanding into areas that scientists once thought could not support them. Wolves have shown that they can tolerate more human disturbance than previously thought.

From a biological standpoint, we know that wolves can and do survive near urban areas. But whether wolves persist near cities and towns will depend on conflicts with people.

#### How far do wolves travel?

Wolf packs usually hunt within a specific territory. It is not uncommon for territories to be up to 50 square miles but they may even extend up to 1,000 square miles in areas where prey is scarce. Home ranges for wolves in the Northern Rocky Mountains usually don't exceed 400 to 500 square miles. Wolves have been known to travel as far as 30 miles a day. Although they trot along at 5 miles per hour, wolves can attain speeds as high as 40 miles per hour. Most wolves disperse from the pack they were born into by age three. Dispersing wolves have been known to travel as far as 600 miles.

#### What do wolves eat?

Wolves are carnivores and feed primarily on hoofed mammals ("ungulates") such as deer, elk, moose, caribou, and rarely on mountain goats and bighorn sheep. They also prey to a much lesser extent on beavers, rabbits, and almost any other small animal. Coastal wolves in British Columbia are known to eat salmon. Wolves are also natural scavengers and readily feed on the carcasses of dead animals. Wolves have been documented to prey on cattle and sheep when they recolonize agricultural lands in close proximity to people or areas used for livestock production. In 2014, approximately 17 percent of all known wolf packs within the Northern Rocky Mountains, including Washington and Oregon, were involved in at least one livestock depredation.

#### If wolf numbers get too high, will deer and elk be eliminated?

Wolves have evolved with their prey for many thousands of years, and the health of wolf populations is dependent on the size and health of their prey base. Under certain conditions wolves can cause local decreases in prey numbers. But if deer and elk numbers were to decline over an extended period of time, due to severe winter conditions or habitat changes, wolves would have less food available and their numbers would decline. They would produce fewer pups and fewer pups would survive to adulthood. Also, more adult wolves would die because of poor health or in conflicts with other wolves. Thus, wolf numbers would decline before their prey could be eliminated.

Wolves are just one of many factors affecting elk and deer populations. Others include harsh weather, poor habitat, high hunter harvest rates, and other predators such as cougars and bears. While in most cases wolf predation is a minor contributor to the decline of some herds, experience in other states indicates there are circumstances where wolves have affected smaller populations of deer, elk, and moose.

As Washington's wolf population continues to grow, WDFW has expanded monitoring efforts to help understand the effect of wolf predation on state herds. Learn more in the state's Wolf Conservation and Management Plan: http://wdfw.wa.gov/conservation/gray\_wolf/mgmt\_plan.html

#### Do wolves really take the old, young, sick, starving, or injured animals?

It is well-documented that wolves tend to select vulnerable prey. Old, young, sick, starving and injured animals may be more vulnerable, but weather, location, or other conditions can make otherwise healthy animals vulnerable as well. Hunting and bringing down big game is dangerous work and wolves are sometimes injured or killed by elk, moose, and even deer. In the wild, they cannot afford to be injured; therefore, they go after the easiest animals to kill and often leave less vulnerable animals alone.

#### Do wolves kill more than they can eat?

Usually wolves consume most of what they kill. However, there are instances where wolves have been documented to kill more than they could eat at one time when conditions such as deep snow or other unusual circumstances made it easy for them to kill their prey. If left undisturbed, they often returned to those kills and continued to feed on them.

#### What is a wolf pack?

The wolf pack is an extended family unit that includes a breeding male and female. In most packs, there is only a single breeding pair, and subordinate adults do not breed. Packs typically produce a single litter each year averaging 4 to 6 pups per litter.

Two or more wolves traveling together can constitute a "pack," but a pack typically consists of five to 10, including the breeding male and female. The rest of the pack may consist of pups from the current year and a few offspring from the past year or two that are subordinate to the breeding adults. Packs can be substantially larger in size in locations with abundant prey. Some packs have grown to 20 or more wolves, but those packs typically persist for only a few years before they split up. Pack sizes vary considerably, depending on the size of the wolf population in a particular area, whether they are feeding pups and the amount of prey available.

#### Do wolves mate for life?

A wolf pair usually mates until one dies or is pushed out of the pack and then the remaining mate will find another mate.

#### What happens to a pack when the breeding male or female is killed?

Wolves are very adaptable and have evolved to survive under all sorts of conditions. The death of one or both members of the breeding pair usually results in another adult wolf coming in to replace the one that died; however some packs break up when both breeding adults die. Packs sometimes adopt unrelated dispersing wolves that could also become breeding members of the pack. Even when packs dissolve after the death of a breeding wolf, new packs usually form again in those areas. Losing a breeding wolf may affect individual packs, but does not affect wolf populations.

#### How does a non-breeding wolf attain breeding status?

A wolf can stay with the pack into which it was born and bide its time until it works its way up the dominance hierarchy or it can disperse to find a mate and a vacant area in which to start its own pack. Both strategies involve risk. A wolf that bides its time may be out-competed by another wolf and never achieve dominance. Dispersers must hunt on their own until they form or join a new pack, and they may be killed when they invade the territory of other wolves.

Dispersers can leave a pack at any time of year but usually leave the pack in autumn or winter, prior to the February breeding season. They must be alert to entering other wolf packs' territories and they must keep a constant vigil to avoid encounters with people, their primary source of mortality. Dispersers have been known to travel great distances in a short time. In Washington, 2 wolves known to have originated in the state were legally harvested in Idaho and British Columbia, Canada, in 2012. A dispersing wolf traveled from Wyoming to the North Rim of the Grand Canyon in 2015.

#### When do wolves mate?

The breeding season for wolves in Washington and the Northern Rocky Mountains is from late January through February; the further south, the earlier the breeding season. Females are pregnant for about 63 days before they give birth to 4 to 6 pups in April.

#### Where do wolves give birth to their young?

Pups are usually born in a den excavated as much as 10 feet into well-drained soil. Sometimes the female selects a hollow log, cave, tree with overhanging branches, or abandoned beaver lodge instead of making a den. At birth, wolf pups are deaf and blind, have dark fuzzy fur and weigh about one pound. They begin to see at two weeks old and can hear after three weeks.

#### At what age are wolf pups weaned?

Wolf pups are weaned at about six to eight weeks old, and then the adults begin to bring them meat. Most adult wolves center their activities on dens while traveling as far as 20 miles away in search of food, which is regularly brought back to the den to feed the pups. Adults eat the meat at a kill site, often miles away from the pups, and then they return and regurgitate the food for the pups to eat.

#### How long do wolf pups stay in the den?

By early- to mid-summer, pups are usually moved some distance away from the den to a rendezvous site or nursery area. Wolves may use a single rendezvous site or have a series of rendezvous sites that they use throughout the summer. These sites are the focus of the pack's social activities for the summer months and are usually near water. By August, the pups wander up to two to three miles from the rendezvous sites and use them less often. The pack abandons the sites in September or October, and the pups, now almost full-grown, follow the adults.

#### How long do wolves live?

Fewer than half of wolf pups live to adulthood and few wolves in the wild live more than five years. However, gray wolves are known to have lived up to 13 years in the wild and 15 years in captivity.

#### In protected populations, what kills wolves?

In protected areas (i.e., national parks and refuges), pups can often die from starvation and disease. Adults can die from disease, starvation, injuries from hunting prey, or territorial disputes between neighboring packs.

Humans are the largest cause of mortality for adult wolves living outside of protected areas. Territorial conflicts between packs, injuries from hunting prey, disease (such as canine parvovirus and mange) and starvation are other common causes of death.

#### Are wolves a threat to humans, in particular small children?

Aggressive behavior from wild wolves towards humans is rare. Mark McNay of the Alaska Department of Fish and Game compiled information about documented wolf-human encounters in "A Case History of Wolf-Human Encounters in Alaska and Canada," which was published in 2002. There are 59,000 to 70,000 gray wolves in Alaska and Canada, and since 1970, there were 16 cases of non-rabid wolves biting people. Six of those cases were severe. Since that report was written, wolves killed a man in Saskatchewan, Canada, in 2005. It appears to have been a situation where wolves were feeding in an unregulated garbage dump and became habituated to people. In 2010 a woman jogging outside a remote village in Alaska was killed by wolves.

Wolves passing near, watching, or otherwise behaving in a non-threatening way near humans should not necessarily be considered dangerous. But wolves can become habituated to humans in areas where they regularly encounter humans or human food. To avoid habituation, wolves should never be fed or approached.

Where the wolf remains listed as endangered, the ESA allows take of any endangered or threatened species if there is an immediate threat to human safety. If someone is in a situation where they feel they or someone else is in immediate danger from a wolf, they can kill the wolf. Additionally, state and federal land management agencies can remove or kill a wolf that presents a demonstrable, non-immediate threat to human safety. In areas where the wolf is no longer protected by the Endangered Species Act, state regulations define the actions that people can take to protect themselves if they feel threatened by a wolf.

#### Is there any danger from wolves to my pets?

Yes. The gray wolf is the ancestor of domestic dogs. Wolves view dogs as competitors or territorial intruders and have attacked and killed them. Owners of dogs need to be aware of the potential risk to their dogs if they are in wolf habitat, especially when guarding or herding livestock, hunting, accompanying hikers, or running at large.

In areas occupied by wolves, homeowners should not allow dogs to roam at large or leave dogs outside overnight unless kept in a sturdy kennel. Dogs should be kept on leash or in visual/auditory range and owners should vocalize frequently, including use of whistles. Dogs should be trained not to chase or approach wildlife and to return on commands. Homeowners should not leave dog food outside and avoid feeding wildlife near their homes.

Hikers should consider leaving their dogs at home when visiting sites with wolves. Hikers with dogs should keep them on leash or closely controlled. Hikers should make noise and equip dogs with bells or other noise-makers to alert wolves to the presence of people. If a wolf is encountered, bring dogs to heel and leash them, and stand between them and the wolf; wolves avoid humans and this often ends the encounter. Don't try to break up a physical fight between a wolf and a dog.

Hunters who use dogs in areas where wolves are known to exist (either to find game birds or, where allowed, to find other game animals), should avoid releasing dogs in areas with fresh evidence of wolves (tracks, scat, howling, etc.) Stay in close range of hunting dogs, communicating with them by voice or whistle, and use bells or beeper collars on dogs to alert wolves to the presence of people. Hounds used to tree game should be released only on fresh sign to avoid long chases, and when treeing game, reached as soon as possible so they are not unattended for long.

Be alert and aware of the potential risks when recreating or living in wolf country. To prevent problems with wolves and other wildlife, always keep a clean camp or home site to avoid attracting wolves that might scavenge for food, or more likely prey upon other animals that are attracted to both intentional and non-intentional feeding opportunities.

Wolves very rarely approach people, but may be drawn to dogs that are with people. If you take a dog with you camping, hiking or hunting in wolf country, recognize the risks and maintain control of the dog at all times. If you live in wolf country, take precautions to protect your dog using indoor shelter

(doghouse, shed, barn, etc.) at night, chain link or electric fence around dog yards, and lighting and/or noise-making devices near dog-use areas. Clearing brush and tall vegetation can help provide a protective perimeter around dog yards.

#### Do wolves make good pets?

No, neither wolves nor wolf-dog hybrids make good pets. While wolf puppies might be as cute as dog puppies, they will grow up to be wolves, not dogs, no matter how much they are treated like dogs. With wolf-dog crosses, or hybrids, the higher the percentage of wolf genes, the more wolf-like behavior the hybrid will exhibit. There is no way of knowing the percentage of wolf genes in a cross that is an offspring of a hybrid.

Many an unsuspecting wolf lover has purchased a wolf pup only to find that it is largely untrainable, because it does not care much about pleasing its owner. As it grows into adulthood it becomes unpredictable, if not downright dangerous. Releasing wolf-dog hybrids to the wild is prohibited in some states.

#### How big are wolves?

The size of a wolf varies depending on where it is found. Smaller sizes tend to be found in the southern portion of wolf range and larger sizes in the northern portion. Females tend to be slightly smaller than males. The average size of adult males is 5 to 6.5 feet long (tip of nose to tip of tail), 26 to 32 inches high at the shoulder, and 90 to 120 pounds in weight (in Alaska they occasionally reach 145 pounds). The average size of adult females is 4.5 to 6 feet long, 26 to 32 inches high at the shoulder, and 70 to 100 pounds in weight. Wolves reach adult height (but not full adult weight) by 1 year of age. Most males take several years to fully mature.

#### How can you tell the difference between a gray wolf and a coyote or a large dog?

Size is a key difference between coyotes and wolves. Coyotes range from 3.5 to 4.5 feet long, 16 to 20 inches high at the shoulder and 20 to 50 pounds. This is about half the size of a wolf. Coyotes tend to have gray or reddish brown fur with rusty colored legs, feet, and ears, and whitish fur on the throat and belly. Their ears are pointed and relatively long, and the muzzle is pointed and petite. The track size is about 2.5 inches long and 1.5 inches wide. Coyotes tend to carry their tail held below the back line. The tail may or may not be black tipped and is less than 18 inches long. In contrast, wolves have many color variations but tend to be buff-colored tans grizzled with gray and black (although they can also be black or white). Their ears are rounded and relatively short, and the muzzle is large and blocky. Wolves generally hold their tail straight out from the body or down. The tail is black tipped and over 18 inches long. A wolf track size is about 4.5 inches long and 3.5 inches wide. It is important to note that each

individual animal is different, and age and gender of the wolf can affect where they fall within the expected range.

Wolves and other wild canids usually place their hind foot in the track left by the front foot, whereas a dog's front and hind foot tracks usually do not overlap each other. Only a few breeds of dogs leave tracks longer than 4 inches (Great Danes, St. Bernards, and some bloodhounds). Although the tails of many dogs are curled; coyote and wolf tails are never seen curled.



How can I learn more about wolves and the things that are going on right now that will affect their future in Washington?

http://wdfw.wa.gov/conservation/gray\_wolf/